

Workshop on Storage Challenges in the UK

4rd SIG-IO-UK Workshop



Image under free license (CC0)



Limitless Storage
Limitless Possibilities

<https://hps.vi4io.org>

Julian M. Kunkel

2020-04-23

The Special Interest Group I/O in the UK



Goals

- Strengthen networking the community in the UK:
 - ▶ System, middleware, ..., researchers and developers
 - ▶ Users with I/O-intensive workflows
 - ▶ Data centers
 - ▶ Storage and independent software vendors
- To bring forward RD&E:
 - ▶ Research
 - ▶ Product development
 - ▶ Funding opportunities

Communication

- Annual meeting
- Mailing list for opportunities

Sponsoring



The workshop is supported by
Data Direct Networks



The workshop is powered by



esiwace
CENTRE OF EXCELLENCE IN SIMULATION OF WEATHER
AND CLIMATE IN EUROPE



EU funded Project: ESiWACE



The Centre of Excellence in Simulation of Weather and Climate in Europe

- Representing the European community for
 - ▶ climate modelling and numerical weather simulation
- Goals in respect to HPC environments:
 - ▶ Improve efficiency and productivity
 - ▶ Supporting the end-to-end workflow of global Earth system modelling
 - ▶ Establish demonstrator simulations that run at highest affordable resolution
- Funding via the European Union's Horizon 2020 program (grant #823988)

<http://esiwace.eu>



esiwace

CENTRE OF EXCELLENCE IN SIMULATION OF WEATHER
AND CLIMATE IN EUROPE

The Virtual Institute for I/O



Goals

- Provide a platform for I/O enthusiasts for exchanging information
- Foster training and collaboration in the field of high-performance I/O
- Track and encourage the deployment of large storage systems by hosting information about high-performance storage systems

<https://www.vi4io.org>



The Journal of High-Performance Storage



Features

- Open reviews
- Living papers
- Digital replicability
- Free open access
- First two papers are available for review in the incubator:
 - ▶ Characterizing I/O Optimization Effect Through Holistic Log Data Analysis of Parallel File Systems and Interconnects
 - ▶ Investigating the Overhead of the REST Protocol to Reveal the Potential for Using Cloud Services for HPC Storage

The logo for the Journal of High-Performance Storage (J∞HPS). It features a large grey 'J', a red infinity symbol '∞', and the letters 'HPS' in a bold, red, sans-serif font.

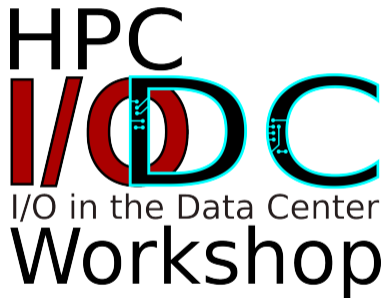
<https://jhps.vi4io.org>

Next Event: HPC IO DC Workshop



The HPC I/O in the Data Center Workshop

- When: Thursday, June 25th, 2020
 - ▶ Virtual Event at ISC HPC
 - ▶ Full day workshop
- Free to attend!
- Data-center related topics
 - ▶ State-of-the practice
 - ▶ Expert talks
 - ▶ Research to overcome obstacles



<https://hps.vi4io.org/events/2020/iocd>

Structure of Today's Agenda



10:00 5 talks

12:30 Virtual lunch

13:00 4 talks

16:40 Discussion: Supporting the I/O needs for applications

15:00 Virtual coffee break

15:30 3 talks

17:00 Discussion: Hot topics

17:30 Farewell